Chapter 17
Factors Influencing Drug Use and HIV Risk in Two Nicaraguan Cities

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Abstract This chapter presents the results of two related exploratory, qualitative studies on drug use and HIV risk conducted in the cities of Managua and Chinandega, Nicaragua between 2002 and 2005. The objectives of this research were to: identify methods of reaching drug using populations in the country; provide an initial description of the patterns of drug use, emphasizing regional differences; explore the relationship between drug use and HIV transmission; and provide preliminary recommendations for the development of drug use and HIV prevention efforts and for future research directions. The study designs included ethnographic observation and interviews to assist in gaining entry into drug-using communities, in-depth interviews with drug users and traffickers (121) and focus groups (13) with sectors of the population likely to provide different perspectives on the research domains: health professionals working with high-risk behavior groups, female sex workers, gay men, university students, taxi drivers, injection drug users, and family members of drug users. Drug use, the availability of drugs and distribution were reported, and included: ubiquitous drug supplies; the involvement of all social strata; the impact of crack on drug-use patterns; concerns about use by children and youth; well-established local distribution mechanisms; group drug purchase and sharing, and (limited) needle use and equipment sharing. Sexual risks included unprotected sex with partners and sex for drugs and/or drug money. The lack of drug prevention education in the community and schools, and limited treatment resources were also reported. Conclusions highlight the need for public and policy acknowledgement and response regarding drug use, and the link between HIV/AIDS and drugs in the country.

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Data gleaned from health surveys and HIV studies, as well as media reports, increasingly identify drug use as a growing problem in Nicaragua. Poverty, international drug traffic, and the lack of information, education, and drug treatment add to the potential for drug use being an increasingly important factor in HIV transmission. However, no large-scale studies on drug use have been carried out in the country, nor has any significant government or international funding been directed at HIV/AIDS behavioral research. These qualitative behavioral studies funded by the National Institute on Drug Abuse (NIDA) (Grant No. R03 DA16163, M. Shedlin, PI and an international supplement to P-30 DA011041-06S2) were a direction new to health research in the country. The objectives of the studies were twofold: (1) to identify, document, and describe drug use in the cities of Managua, the capital, and Chinandega, closer to the Honduran and Salvadoran borders, and (2) to support increased awareness of the relationship of drug use and HIV transmission in Nicaragua.

It was clear during the design of this research, however, that any investigation of drug use and HIV/AIDS in the country would need to place these two emerging epidemics in the context of two decades of war, a prolonged economic crisis and a large population increase. These factors all contributed to a marked deterioration of the social indicators of a population of 5.1 million people, 53% of which is under 18 years of age. To explain further, Nicaragua is the third poorest country in the Americas, with a per capita gross national product of $453. Poverty affects 2.3 million persons, 831,000 of whom live in extreme poverty, mainly in the Central and Atlantic regions. The breakdown of income distribution shows that 45% of all income goes to the richest 10% of the population, while only 14% goes to the poorest (United Nations Development Program [UNDP] 2000). Although the unemployment rate is officially estimated at 12%, underemployment may be as high as 14%, and higher in the Atlantic region (El Centro Nicaragüense de Derechos Humanos [CENIDH] 2004).

Nicaragua's main challenge is to overcome inequity and poverty, which affect children and women most severely. One of every three children has some degree of chronic malnutrition and 9% suffer from severe malnutrition. The maternal mortality rate (MMR) of 150 per 100,000 live births is unacceptably high. In the Atlantic region and areas difficult to access, MMR may be twice as high as the national average. Adolescent pregnancies account for one of every four births nationally. Safe water and sanitation coverage continues to be low, particularly in rural areas and those with dispersed populations (United Nations Children's Fund [UNICEF] 2004).

Geopolitical, Social, and Cultural Factors Influencing the Nicaraguan HIV Epidemic

The onset of the HIV epidemic was more recent in Nicaragua than in neighboring countries due to an 8-year-long civil war, an economic embargo imposed by the United States, and a policy of semi-isolation. With a change of government

in 1990, Nicaragua opened itself to international contact, including people arriving or returning from countries where HIV is prevalent such as Honduras and the United States (Low et al. 1992). However, while Nicaragua's epidemic began later, it is believed that all the preconditions exist to bring about a serious HIV/AIDS epidemic (MCP 2002). Arauz, Ortells, Morales, Guevara, and Shedlin (1997) examined demographic and social indicators and concluded that conditions existed for an epidemic of "major dimensions" in Nicaragua.

The USAID National HIV Assessment by Sanchez, Shedlin, and Araica (2000) came to the same conclusion and listed the following preconditions:

- Displacement due to civil war and natural disasters.
- Increased prostitution in areas with a high concentration of transient workers.
- Indicators that drug trafficking is influencing local drug use, especially among youth.
- A large gay population that is encouraged to stay hidden.
- Men-who-have-sex-with-men (MSMs) who form the bridge between MSMs and heterosexual communities.
- Migrants and other highly mobile populations.
- Shared borders with countries that have major HIV epidemic, e.g., Honduras.
- A large youth population often lacking the information necessary to avoid sexually transmitted infections (STIs) and HIV.
- Catholic Church and Christian evangelical groups deeply antagonistic to HIV/AIDS prevention education.
- Lack of a condom culture that supports condom acceptance and use.

Several older studies have indicated that the general population lacked some basic knowledge about HIV/AIDS. For example, Low et al. (1992) discussed a 1989 Knowledge, Attitude, and Practical (KAP) study of adults in Managua that revealed that more than 90% knew the major routes of HIV transmission, yet approximately half believed kissing and mosquitoes could spread HIV. Most believed that isolation of HIV+ individuals and control of immigration were ways to control the epidemic (Low et al. 1992). A 1995 study with university students illustrated their lack of knowledge of the difference between HIV and AIDS and ambivalence about individuals with HIV (Cisneros Santamaria 1995). While general knowledge about HIV/AIDS and condoms was good, the actual use of condoms remained low. The Demographic and Health Survey (USAID 1998) found that six of every 10 women knew they could prevent getting HIV by using a condom and one-fourth thought they could prevent infection by having only one partner. These numbers were similar to answers given by the men, 65% and 22%, respectively. Yet, only 16% of sexually active men reported using condoms occasionally (Ministerio de Salud [MINSA] 2000). In 2000, one of every 10 women had heard of AIDS and knew of ways to prevent transmission; however, only 2% of women said they were currently using protection (MINSA 2002).

The Ministry of Health and AIDS Control and Prevention conducted HIV prevalence surveys in 1996 among female sex workers (FSWs) and MSMs. They found an HIV prevalence rate of 1–2% among FSWs and MSMs (MINSA 2000)

suggesting a prevalence rate in the general population of <1%, and placing Nicaragua at the level of a nascent epidemic using World Bank criteria. However, there were many concerns about the accuracy of these statistics. Arauz, Ortells, Morales, Guevara, and Shedlin (1997), for example, discussed the reasons why seroprevalence data did not "correspond to the reality" of HIV prevalence in the country, including lack of testing services and a focus on high-risk behavior groups that omitted the general heterosexual population (p. 123). A more recent USAID HIV/AIDS Assessment also identified serious constraints on the utility of existing prevalence data (Sanchez et al. 2000).

The first case of AIDS in Nicaragua was diagnosed in 1987. In 2002, the Central American Multicenter HIV/STI Study found an HIV prevalence rate of 0.3% in sex workers in Managua, Corinto and Bluefields ($n = 463$) and an HIV prevalence of 9.3% in MSM in Managua ($n = 199$). It was also reported that among MSMs who had anal sex with occasional partners in the last 30 days, only 61% of the 62 MSMs responded that they had used protection (MINSA 2003).

As of March 2006, Nicaragua reported 2,116 registered HIV infections (MINSA 2006). Ninety-four percent of the HIV infections in Nicaragua are transmitted through heterosexual contact. Individuals who consider themselves homosexual and MSMs, contributed 26% of the total 94% of HIV infections transmitted through heterosexual contact (MINSA 2006). HIV transmission through sharing syringes for injecting drugs contributed to 3% of the HIV infections, perinatal transmission of infection accounted for 2.8%, and blood transfusions contributed to only 0.2% of the infections. The epidemic remains primarily in the main urban and economic centers (MINSA 2004). The United Nations Joint Programme on HIV/AIDS (UNAIDS) estimates that there are 6,400 persons living with HIV in Nicaragua, 0.2% of the adult population (UNAIDS 2004). A more realistic estimate is believed to be between 24,160 and 36,240 based on registered deaths and a 60% under-registration estimated by the Ministry of Health (MINSA 2004). And as is true for other countries in the region, HIV infection among housewives is rapidly increasing. The US Agency for International Development (USAID) reports that the risk of HIV infection among housewives in Chinandega is twice as that among commercial sex workers in the area (USAID 2004).

The National Program for the Prevention and Control of HIV/AIDS and Sexually Transmitted Infections in Nicaragua was implemented in 1998. Currently, antiretroviral treatment in the country is financed exclusively by the Global Fund. Nicaragua has been granted approximately US$ 10.1 million in funding to be spent over 5 years through the Global Fund to fight AIDS (Global Fund 2006). The only hospital administering antiretroviral medications is in the capital, Managua; however, MINSA is planning to decentralize distribution. Nicaragua is one of the few Latin American countries in which antiretroviral treatment is not available to the majority of the population which needs it. This lack of access to antiretroviral treatment is compounded by stigma and marginalization affecting HIV positive individuals in Nicaragua (USAID 2004). In 2005, the World Health Organization estimated that 1,000 individuals in Nicaragua needed antiretroviral treatment (World Health Organization 2005).

The international community is also assisting Nicaragua to develop effective prevention strategies. The Center for Communication Programs at the Johns Hopkins Bloomberg School of Public Health and Fundación Nimehuatzin, for example, are collaborating on a multisectoral community mobilization project. This model was validated in Chinandega and is now being implemented in nine additional locations with funding from Luxemburg. Health communication initiatives are supported in school, the local health systems, and local government (Center for Communication Programs 2005).

Geopolitical Factors Influencing Drug Use in Nicaragua

The problem of drug use in Nicaragua began primarily as one of geography because Nicaragua's Atlantic Coast lies on a transshipment route between drug producing and consuming countries. When boats laden with drugs are about to be apprehended, they jettison their illicit cargo. Fishermen find the packages floating on the water, and children retrieve them from the beaches. Of course, drugs enter across land borders as well. The returns from selling drugs are far greater than can be earned from fishing or agriculture. "People get hooked, first economically, then physically" (Hamilton 2004).

The Nicaraguan legislature passed a comprehensive Drug Law (#177: The Narcotic Drugs, Psychotropic Substances and Other Controlled Substances Act) in May, 1994, but drug trafficking and drug consumption continued to increase. "Every day it is more evident that the inclusion of the country in the international narcotraffic route is accompanied by an increase in the local use of drugs" (Van Wichen, Largaespada, Ormel, and Montedeoca 1995). A police report cited in *La Nación* in 1999 already noted that the presence and use of drugs in Nicaragua was rapidly growing (La Nación 1999). The National Police estimated more than 12% of crimes in Nicaragua were drug-related and were on the increase, a 202% increase since 1990. As the article quoted:

> "The tentacles of drug trafficking and its related crimes are drawing into their decadent trap thousands of young people, with repercussions of violence and thefts, from which not even the families of the addicts can escape, awakening awareness of the seriousness of this phenomenon in more and more layers of society" (p. 15).

Anecdotal accounts in the media continued to appear, especially on trafficking and the consequences of drug use by youth. However, few studies and little official information are available on drug *use*. A UNICEF study in 1996 found the use of drugs was even then endemic, the majority of the respondents reporting at least 2 years of drug use. Glue sniffing was reported for street children and crack was another street alternative. The study noted, in addition, that the level of drug consumption in the marginal neighborhoods had grown to "worrisome levels" with children initiating drug use at home (Santamaria 1997). A study of Managuan youth, carried out also in 1996 by the Centro de Investigaciones de la Comunicación reported that 92% believed more drugs were being consumed than ever before; that marijuana and cocaine were the drugs most frequently consumed; and almost 19% reported

using drugs even then, almost a decade ago (Chamarro1996). In a study carried out by Fundación Nimehuatzin, sex workers revealed personal drug use with clients, and reported that "most" clients used drugs. They noted that drug use appeared to increase dramatically after 1990, and consisted mainly of marijuana, cocaine, and crack cocaine. The use of injected heroin and cocaine was said to be beginning; however, these women were able to describe injection drug use with great detail. Sex workers on the Atlantic Coast emphasized the impact of crack on women. Gay men in the study were reluctant to admit use, but it was clear that "normal" use included forms of both cocaine and marijuana. MSMs also reported injection drug use (Arauz, Ortells, Morales, Guevara, and Shedlin 1997). The National Survey of Adolescents and Youth identified that 88% of adolescents and youth considered drugs a serious issue (Agudelo 1999).

Description of the Study

The research was carried out between 2002 and 2005 in Managua, the capital city, and Chinandega by an interdisciplinary team organized by Fundación Nimehuatzin, a Nicaraguan NGO with long experience in reaching high-risk behavior populations in the country. Data obtained include: the sociodemographic characteristics of drug users; the context of drug use and HIV risk; norms regarding drug use, sexuality and sexual behavior (e.g., partner relationships, transactional sex, MSMs, high-risk practices); differences in drug and sex-related protective and HIV-risk behaviors; perceived changes in drug use patterns over time and factors influencing these changes; and knowledge and perception of risk of HIV.

Among the objectives of the research were: (1) identify methods of reaching drug-using populations in Nicaragua; (2) provide an initial description of regional differences in patterns of drug use in the country; (3) explore how drug use influences HIV transmission; and (4) develop institutional capacity to conduct research, especially in the NGO sector, in drug and HIV behavioral research.

These objectives reflected the need for data on the relationship between drug use and HIV which are almost entirely missing in Nicaraguan HIV research, prevention planning, and policy. They also reflected a response to the need for capacity building in substance abuse research, not only at the government levels, but also at the community level by agencies most able to reach drug users to obtain data and to implement prevention interventions.

Study Locations

Data collection was carried out in Managua, the country capital and the largest city, and Chinandega, a city on the northwest border, contiguous with Honduras. After the destruction of Managua in 1972 by a major earthquake, rebuilding has been disorganized and only recently has the center of the city begun reconstruction and re-population. The city currently has more than a million and a half inhabitants who

are predominantly Mestizo. Because of migration from the rural areas and the economic crisis, unemployment is high (UNDP 2000). Male and female prostitution, as well as the number of homeless women and children on the street is increasing, as is the problem of youth gangs involved in crime and drug dealing. There are 10 public hospitals in Managua and a similar number of private clinics. There are many identified barriers to HIV testing, among which is the limited availability of counseling and testing services (Fundación Nimehuatzin 2004).

Chinandega has a population of 122,000 in the urban center (Population Figures 2006). It is located 137 km from Managua and has fluid communication with the Capital and with towns and cities in Honduras. The major health problems include malaria vivax, STIs, and dengue. There are two hospitals, one health center, 10 health posts, and six private clinics in the area. Recent reports provided by the Health District (SILAIS), cite STIs and HIV as a grave problem in the area (for HIV/AIDS through August 2002, 33.8/100,000, the highest in the country). According to these data, housewives and women workers are the most affected. In December 2000, Chinandega represented 14% of the HIV infections diagnosed throughout Nicaragua, and as of June 2004 the number of diagnosed HIV infections in Chinandega made up 17% of the recorded national total. Chinandega also has high unemployment rates and is also higher when compared with the unemployment rate of Managua.

Methods

Gaining Entry into Drug-Using Communities

In consultation with NGOs and government agencies, the research team identified key informants and gatekeepers to assist in locating areas where drug users could be contacted and the most appropriate, sensitive, and confidential methods for gaining their participation. Because the implementing agency, Fundación Nimehuatzin, had been involved in HIV prevention in these areas, they had already identified individuals and agencies with whom they could work and from whom they obtained guidance for this new research focus. Recruitment sites were street locations, bars and community agencies and treatment programs. The local worker's familiarity with the community also assisted in gaining access to the population as well as providing additional assurances of confidentiality, since Nimehuatzin was well known and trusted in high-risk behavior communities in Managua and throughout the country.

Multi-Method Ethnography

The study involved an ethnographic approach and methods. A key element, especially in studies of high-risk behavior groups and "hidden populations," is sufficient access to understand behavior by observation and interviews (Marshall, Singer, and Clatts 1999). The ethnographic component had several aspects, including identifying

locations for recruitment, collecting data, and using multiple data sets (incorporating triangulation of sources and types of data), to examine validity and reliability of findings. Along with interviewing, community observation was undertaken to identify and describe drug use patterns and sexual risk behaviors. In addition to documenting the existence of drug-using communities and describing them, the study was able to identify a range of experiences, attitudes, and beliefs relating to drug use and HIV risk. Qualitative data obtained include: detailed descriptions of situations, events, people, interactions and observed behaviors, and direct quotes from individuals about their experiences, attitudes, and beliefs.

Interviews

Three types of interviews were conducted. Individual semi-structured interviews were carried out with key knowledgeable sources (30) and with drug users/traffickers (121). In addition, focus group sessions (13) were carried out with sectors of the population likely to provide different perspectives on the research domains: health professionals working with high-risk behavior groups, FSWs, gay men, university students, taxi drivers, injection drug users, and family members of drug users.

Analysis of Interviews, Focus Groups, and Observational Data

Data in the form of audiotapes, responses to the semi-structured questionnaires, interview notes, and transcripts of the focus group sessions were obtained. The assessment of the quality and completeness of the data in relation to the key research questions was an on-going process. Because similar issues are researched using different methods and because multiple data sources were involved, multiple data sets were available on the research domains and key issues. Analysis involved the use of Atlas.ti software and SPSS. The classification of evidence from all data sets was organized to identify salient patterns and relationships.

Results

The results discussed represent the reported experience, beliefs, and perceptions of the drug users in individual interviews, the key informants, the focus groups with the seven groups listed above, and observations by the field staff.

Characteristics and Experience of the Sample

Of the 121 drug users and four others who professed being only “traffickers” interviewed individually, 98 (81%) drug users were male, the majority (75%) between

18 and 35 years of age. The 23 women interviewed (19%) were distributed among all age groups within the 18–55 sample. Most (73%) were born in Managua with the remainder born in other cities in Nicaragua, and two in Mexico City. Thirteen percent of the participants were either illiterate or had incomplete primary education; many (42%) had attended, but not completed, high school. Nineteen percent of the sample had attended a university, but not obtained a diploma. Five participants had completed a university degree and four had completed a technical degree. Eighty-three percent of the participants spoke only Spanish and 12% spoke English. The occupations listed were varied, ranging from housewife to economist. Student status was given by 15% and was the most frequently cited occupation. Eight participants stated that they did not have any occupation. More than one-third (34%) stated they did not have any religion; 44% reported being Catholic and 17% "Evangélico."

Partner Status and Children

More than half (66%) were single, 26% were married or in a free union, and 7% were divorced. Only one participant was a widower. More than half (52%) were currently in a sexual union. Forty-three percent did not have any children and 22.3% had only one child. Two older men (49 years and 52 years) and one older woman (54 years) reported 13, 14, and18 children, respectively. (The 23 women reported a total of 120 pregnancies between them.) Of the men and women who had children, only 37% reported having a good or regular relationship with them.

Residence and Travel

All but three participants lived in an urban area, and 79% had lived in the city of the study (Managua or Chinandega) for more than 10 years. Most lived as part of a family unit (26%), with friends/relatives (54%), or with a sexual partner (7%), Four men lived alone (3%), 3% of the participants were homeless and eight persons were incarcerated at the time of interview. Participants reported travel outside the country, primarily Central America and to the United States. Reasons for travel included work, visiting family, tourism, and drug treatment. About one quarter (34%) had lived outside Nicaragua at some time in their lives, and among those 9% had lived in the United States or Canada. Almost 77% had some relative or friends living abroad, and 61% had friends or relatives in the United States or Canada. Thirty-eight percent maintained communication with them regularly.

Incarceration Histories

Of the 121 individuals who responded to the question concerning incarceration, 77 (64%) had been in jail or prison at least once, many of these individuals having

multiple incarcerations in Nicaragua and outside the country (the United States, Switzerland, Panama). They listed drug transport (being a "mule"), selling, robbery, gang activity, sex for drugs, prostitution, and arson (the home of a member of another gang) as reasons for their arrests.

Initiation of Drug Use

Most users (88%) initiated their drug using careers before they were 21 years of age, and 56% before the age of 15 years. Family and personal problems and curiosity were the main reasons given for initiating drug use, although a few users mentioned peer pressure/acceptance. Most mentioned friends (84%) in the neighborhood, at school and in the street as those with whom they first used a drug. Only seven individuals (6%) mentioned that they had started using a drug alone. Because of the age spread of the sample and differences in age at first use, the data capture initiation of drug use over an almost four decade span, between 1967 and 2001. Almost two-thirds (61%) reported marijuana as the first drug used. Alcohol was mentioned by only 15% of the sample, cocaine was mentioned by 12% as the first drugs used. Four and 2% respectively of the sample mentioned crack and glue as the first drug used. Collective purchase appeared common, 58% of users responding that they had done so ("echarle la vaca").

Current Drug Use

One hundred and twelve of the 121 study participants mentioned crack as their main drug (93%), some saying that they used it alone, others stating that they combined crack with marijuana, snorted or injected cocaine and alcohol. The majority (86%) also used marijuana regularly, either alone or in combination with crack, cocaine, alcohol, and/or "pills" (pharmaceuticals). Cocaine use was cited by 81%, either alone or in combination with other drugs. Only one person mentioned using cocaine alone. Eleven individuals (16%) had ever-injected an illicit drug; only one man reported current injection (however, a focus group was held with six additional injectors). Private locations for drug use listed by users included homes and hotels. Public places mentioned were: street; parks; discos; bars; "expendios" (places where drugs are sold).

Perceptions of Drug-Related Health Problems

Users described a wide range of health problems that they attributed to their drug use. They cited kidney problems, hepatitis, anorexia, weight loss, nervous system problems, sinusitis, high blood pressure, hallucinations, stomach pain, respiratory problems, cardiac alterations, anxiety attacks, emphysema, hemorrhoids, pulmonary problems, and psychiatric hospitalizations (Managua). The question about

drug-related health issues also elicited personal information about drug overdoses. Injuries attributed to drug-related violence were also listed.

Sexual Behavior

Of the one hundred respondents who answered the question about perceived frequency of oral sex 67% stated that they do have oral sex, and 53% of the 95 respondents who answered the question regarding the perceived frequency of anal sex, respectively, indicated that they do have anal sex. Twenty-eight percent of the men interviewed said that they had had sex with other men. Fifty-six percent said they had not used condoms during their last sexual encounter. Only 17 individuals (14%) stated that they always used condoms. Of those responding to the question of engaging in sex for drugs or money (94), 35% said they had done so. Fifty-seven percent of the participants reported that they had sex with individuals in their drug networks. Seventy percent believed they could contract an STI, few stating that their risk was related to drug use. Sixty-seven percent believed that they were vulnerable to HIV infection. Fifty percent of the participants had a friend who died of AIDS. Most of the sample (88%) believed they knew about HIV/AIDS having obtained information from health personnel, NGOs, TV, and friends. Seventy-five percent of the participants agreed that there was a relationship between drug use and HIV infection.

Salient Themes and Issues

Popular Attitudes Relating to Drug Use

Focus group data and individual interviews elicited a historical perspective on drug use in the country, especially the perceived control of trafficking and use (primarily marijuana) during the years of the Sandinista government. After the 1990s, traffic, supply, and use of drugs began to increase and expand to new populations. There was also an increase of new drug forms and patterns of use. Key informants and users all agreed that drugs are now sold and used everywhere in the country, along with a greater salience of the pervasiveness of the problem by the community.

The breakdown of societal values was seen by many respondents as both cause and effect of this incremental leap in drug use during the last decade. As one of the health professionals observed sardonically, “Unfortunately, Nicaragua does not have to envy the other Central American countries (any longer)!” The increase in drug trafficking, corruption of the police, the lack of attention to family and children, and the lack of drug prevention education in the schools were cited as critical factors in this increase in supply, demand, and drug-related violence. As drug use spreads, they said, “there is more evidence of personal and family harm, more fear in the

adults that children are being destroyed." University students also saw drug use in the country as a "grave problem."

Family members of drug users discussed stigma and the shame that keeps individuals and families from seeking help. As one focus group participant observed, "the most serious problem is shame, the pain, the suffering, the sadness, and that is what makes us isolate and not share the problem. . .or seek professional help. . .". They also shared their experience with the extreme attitudes of family and friends toward their using drug children and spouses. As one mother said, "the discrimination I've felt toward my daughter by my brothers, my family, my sisters". . .they say "let her die in the street. Why do you go around like an idiot looking for her? Leave her, let her die if that's the life she wants."

This sense of stigma was reflected in the comments of the drug users who said that they are generally seen as "garbage," people "lacking character" who cannot face their problems. People reject us," they said, "those of us who use drugs. . . . we feel badly, ashamed." Some, however, explained that although drug use is still seen as a "moral deficiency," various organizations are working to educate the public that addiction is an illness. Still others stated that it is becoming more common to view users as "normal" because "users go to church, study, play sports and it is common to use drugs. . .this is a change." "There is more tolerance of users," observed another, "it's normal that someone takes out a tube to smoke crack or cocaine. . .that's a frequent thing."

Treatment professionals, on the other hand, were not as optimistic about the attitudes of the health sector toward users. One of the focus group participants stated that the health sector personnel feel that. . . "the best way for those people to be cured is for them to be killed or kill themselves." Even the police, they said, saw their patients (addicts in recovery) as "never getting better, better that they die." "The concept of addiction as sickness, aside from not existing," added one of the providers, "is not accepted (even) when it is explained."

Groups Perceived as Most Affected

Most users interviewed believed that all levels of society and age groups were affected by drugs because "drugs don't discriminate." The professionals in their focus group discussion agreed that similar patterns existed among youth in both public and private schools in the country. All groups, in fact, viewed children and youth as those most vulnerable and most affected by drugs. Taxi drivers described high school and university students as "the worst" (affected), observing the truancy and drug use first hand as they drove around the city. Street children and glue-sniffing youth were described by all sectors interviewed, and are one of the most obvious sights in the main markets of Managua and elsewhere.

Many respondents perceived that "lower classes" were more likely to use crack "because of more violence in their lives," but others saw crack as the drug of choice for all classes. Crack-using sex workers stated that they smoke with each other and that the drug has "no end" without professional help. Use of crack in their community was said to be extensive, e.g. 20–30 women work one of the main tourist hotels

in Managua and all use crack. “When I try it,” said one of the women, “I want more and more. I am capable, if you forgive me, to stop a client because I don’t want to go to the room with him other than to rob him (and continue smoking)”. They agreed that many women now do sex work to buy drugs, unlike in the past. “The most beautiful thing is to live without drugs” lamented one of the sex workers.

While gay men were not identified by the users as a drug-involved community, the men themselves said that some use of marijuana and cocaine existed among them, especially on weekends and holidays/parties. Alcohol, however, was said to be the main drug used in the gay community. Alcohol is a more “social” drug, they said. Vanity and the “deterioration of the body” from drug use, they agreed, is a major deterrent to use for them. The upper class was said to be able to afford such drugs as heroin, to buy larger amounts (of cocaine) at a time, and to be more discreet in their use.

Reasons for Initiating Drug Use

The professionals’ focus group saw the motivation and initiation of drug use in “emotional reasons,” especially “not to feel” hunger, pain, suffering, and to have even a temporary experience of well-being (“bienestar”). Users’ answers were in agreement, citing emotional pain caused by such factors as parental abandonment and death, family conflict and disintegration, sexual abuse and hopelessness. However, they also listed: economic pressures (poverty, lack of employment, and opportunities); peer pressure and rebellion (“bad company”); “addictive tendencies” and curiosity/recreation. University students emphasized the lack of opportunities and a vision of the future as major factors in use among youth, as well as the “euphoria of the moment.” Family members of users mentioned many of these factors, and as one parent explained, “I think also that drug use is a product of fear, the fear of life, for example fear of what is ahead, so it is a way to avoid what scares you in the future.”

For the users, family drug use, including parents, siblings, stepfathers, uncles and cousins was also discussed as influencing their use. “All types of addiction exist in my family,” explained one user, “alcoholic uncles, a father addicted to work, my grandfather addicted to gambling and women, and my mother co-dependent.”

Perception of Legal and Illegal Drugs

Most users stated that they believed legal and illicit drugs to be equally destructive, including alcohol and tobacco, and that legal drugs led to other drug use. Some discussed the lack of awareness that pharmaceuticals were addictive and denial by those addicted to them, while others stated that legal drugs were “less addictive.”

Others stated that “legal drugs are recommended by doctors and cure you, the illegal ones destroy you.” The distinction between legal and illegal carried over to beliefs about recovery as well, some respondents saying that “you can leave legal drugs by yourself, the illegal ones, no (because) they are stronger and you need a lot of help.”

Local Availability

Focus groups confirmed user perceptions that drug supplies and sales (as well as use) were increasingly less hidden in the community. Taxi drivers (identified by sex workers and university students as people who connect drug sources and buyers as well as being "delivery" resources to homes and motels), described well-known locations where drugs could be obtained all over the city 24 hours a day. They emphasized food marts attached to gas stations as ubiquitous sources for drugs. One taxi driver quoted a recent press report stating that 572 *expendios* (small community locations for drug sales) in Managua had been identified by the police, and noted that he knew of "two or three *expendios* in every neighborhood." Most bars, nightclubs, and casinos in the city were also said to be sources of drugs and places where drugs were used. The gay men stated that although connections could be made in their discos, drugs were not generally available there. They did know of other discos where drugs were sold, however.

Observation of Changes in Drugs Used and Patterns of Use

All of the sectors interviewed had observed continual changes in drug-use patterns. Many noted the greatest change with the introduction of crack in the 1990s. Ecstasy and Ketamine were said to be more recent introductions, the former limited in use by its cost. They noted other changes as well, including more diversity in the places where drugs are used, more women using drugs and at a younger age, the mixing of drugs especially pharmaceuticals and alcohol, and the combination of crack and alcohol because "crack destroys your nervous system and liquor balances you." Cocaine and marijuana together, called "maduro con queso" (a national dish of plantains and cheese) was said to be a popular mixture.

The treatment professionals further described their observations of the closing gender-gap in drug use among students, with more female students now using. They also described an increase in poly-drug use, and stated that crack is now the number one substance in their centers, followed by alcohol, marijuana, and, lastly, cocaine. Although most respondents had not used or seen heroin, including the drug-knowledgeable taxi drivers, heroin was said to be coming into the country and being injected, mostly by the upper class. Some users interviewed, however, had observed heroin use in middle- and lower-class users along with a few reporting their own experience. The sex workers also reported observing clients injecting heroin, but agreed with the professionals that heroin users were still primarily foreigners.

Foreign Influence on Drug Use

The users and key informants saw foreign influence on national drug use from a number of perspectives. Culturally, many agreed that Nicaraguans were influenced

by other countries, imitating such things as fashions, holidays, gangs, and drug use. They also noted the influence of foreign drug traffickers and money-launderers (said to be Colombians and Costa Ricans) as well as drug-using tourists from Spain, South America, and the United States. Others, however, stated that while the sequelae of the international drug economy and its players affect Nicaraguan use in various ways, the country has graduated to its own domestic drug epidemic. As one user stated, "Yes, there has been a lot of influence (of foreigners), but now you would be surprised to see how many people use drugs." Another explained, "foreigners do the trafficking, but the use is national." Nicaraguans returning home with new drug habits, including students, and those deported for drug-related crimes were said to influence drug use as well.

Patterns of Drug Use

Users listed alcohol, marijuana, cocaine, crack, pharmaceuticals, and combinations of these drugs as common and currently used by them. Use was reported to be mainly with friends, and less frequently with partners or family members. Adolescents were said to use marijuana, crack, and glue, with marijuana and alcohol together as common. Men were identified as more likely to include alcohol in the regular mix of drugs used. Heroin was said to be increasing in importance with more heroin coming into the country, but still too expensive for most users. Most snorted or smoked their cocaine. Injection was still largely associated with heroin use although some injecting of cocaine was mentioned, especially when discussing drug overdose. University students said that use in their community was mainly marijuana (widespread and frequent use) and alcohol.

The majority of the user/trafficker sample knew or believed drugs were being injected in Managua but did not know about other cities in the country. Of this sample, more than half actually knew someone who injected drugs. They reported knowing of injection use of cocaine, heroin, Ketamine, and pharmaceuticals (especially Demerol). Needles were said to be obtained mainly in pharmacies, and many in the sample had seen injection equipment being shared. Four of the men stated that they had themselves shared injection equipment. Ecstasy was also mentioned, assessed as still too expensive for common use and largely limited to specific night clubs.

Beliefs and Attitudes About Drug Injection

The professionals explained that the negative attitude toward injection and the limited needle drug use in the country had a cultural basis. Injection, they said, was associated with fear and threats instilled in children. In addition, they noted that injection was associated with hospitals and doctors in white coats. On the other hand, they saw illicit drugs historically as coming in not as injected, but as smoked or

swallowed. “We are still a bit far from injecting,” said one provider, “and if injection has arrived, it has been by external influence.”

Most of the comments about needle drug use in the individual user interviews were extremely negative. Most expressed fear of any needles, of injecting anything. They also cited physical risks such as harm to the “blood and brain (brain damage),” inflammation of the injection site, as well as the risk of AIDS. Beliefs about the effects and meaning of injected drugs also appeared to deter injection, such as: injected drugs are stronger; are more addictive; the dose can’t be calibrated; a risk of hepatitis; causes perverse behavior; creates more “dependency”/“addiction” means you have “fallen too low”; “takes you to death.” Sex workers describing heroin and cocaine-injecting clients said clients shoot up in the hotel room but bring them crack because the clients know they would not inject. The few positive comments included: “Injected drugs calm my problems; it is a rapid way to solve my problems,” “. . .other drugs don’t satisfy me anymore;” “. . .it’s the best (thing). . . divine.”

Knowledge/Experience of Drug Overdose and/or Drug-Related Death

A disturbing finding of this study was that more than half of the user/trafficker sample (55%) knew of someone who had died due to drug-related causes. Most described seeing cardiac arrests after cocaine injecting, one man stating that he knew of eight such deaths, and another citing six friends dead due to a combination of heroin and cocaine and one who died while using crack. Others also said they knew of crack overdoses, one man said to have died from crack because he was old and “that drug is not for old people.” Their interviews revealed, in addition, witnessing friends (or multiple people) overdosing but surviving, including their own personal experiences. These were attributed to cocaine injection, heroin injection, and crack. Some individuals who said they had not seen or experienced overdoses knew of friends and neighbors who had died of drug-related “deterioration,” accidental deaths due to drug effects or drug-related violence.

Treatment Resources in the Country

A number of religious, 12-step and private NGO programs were cited by the users and the professionals. All agreed that resources were few, many of the programs rudimentary and without trained staff, and that treatment slots were limited. As one parent of a drug-using son explained, “what is most worrisome is that there are no specialized centers in the country, that is to say, specialized therapists that can really provide follow-up or specialized attention to this. That is really worrisome because there are thousands of young people that have this problem.”

Less than half the users interviewed had ever been in any type of rehab program anywhere. Providers explained that stigma and societal attitudes toward women addicts and patterns of use were very different from those of men, necessitating different treatment resources and strategies not available in the country. This issue was especially salient in the focus group session of the sex workers who did not perceive availability of any treatment resources for themselves.

Drug Use as Risk for HIV/AIDS

All sectors interviewed were well informed about the risk of HIV from needles and unprotected sex. Many of the users reported knowing someone who had died of AIDS. Although few of these deaths were thought to be related to drug use, the majority of users still perceived themselves at risk for HIV and STIs because of unprotected sex, high-risk behavior partners, and transactional sex. Nevertheless, more than half had not used protection with their last sexual encounter, and a number of them were clear that drug use influenced their ability to use protection. Sex workers also stated that although they always used condoms with clients when not using drugs, they estimated that drug use reduced protection to about 60 percent of the time. University students also saw the relationship between drugs and HIV as sexual risk. One student gave the example of young girls on the street prostituting for drug money as the "most direct form here in Nicaragua because it is rare that anyone injects. . ."

Summary and recommendations

Many of the preconditions for an HIV epidemic identified earlier in this discussion combine with additional contextual factors to serve as preconditions for a less well-recognized drug epidemic: poverty, displacement due to civil war and natural disasters, increased prostitution, indicators that drug trafficking is influencing local drug use, especially among youth, a large stigmatized gay population, migrants, tourists, and other highly mobile populations, shared borders with countries also involved in the regional drug economy, and a large young population lacking in education, opportunities and future orientation. Included in this long list are also an abundance of drugs easily available, well-established local distribution mechanisms, (perceived) involvement of the authorities in local supply and protection, the lack of drug prevention education in the community and schools, and limited treatment resources.

The contribution of this exploratory research is in the identification of a range of cultural and contextual factors which are influencing patterns of drug use differentially in the country and thus contributing to and shaping Nicaragua's emerging and related HIV and drug use epidemics. The personal characteristics of the users, their beliefs and behaviors, provide historical perspective as well as current information on drug use among low income men and women. Their reporting of ubiquitous

drug supplies along with behaviors such as unprotected sex with partners, sex for drugs and/or drug money, cultural acceptability of anal sex, group drug purchase and sharing, and (limited) needle use and equipment sharing, all illustrate factors affecting HIV transmission. The fact that so many had seen drug overdoses and drug and AIDS deaths provides a glimpse into a community not yet documented or publicly recognized.

Focus group discussions with other sectors of the community provided different perspectives on drug use in the country and the capital city, these perceptions and experiences concordant with the user interviews. Health and treatment professionals highlighted geopolitical, social, and cultural issues fostering supply and use. Gay men and sex workers shared their own realities and concerns, including increasing drug involvement; taxi drivers, as self-identified "lay psychologists"/witnesses/local drug supply experts, shared their insights; and families of users vented their feelings of guilt, frustration and anger at the societal norms and conditions (and lack of resources) that have placed and keep their lives in disequilibrium.

The study also identified important differences in drug use and HIV risk between two geographic areas of the country, where history, geography, economics, and culture combine to create different risk environments. In the capital city, Managua, respondents reported greater supply, use, and more varied ways of using crack than in Chinandega. Not surprisingly, there were fewer locations where drugs were sold, and they were less stable and more clandestine in Chinandega, thus influencing supply. The study also identified greater stigma toward drug users, better information about HIV/AIDS and more reported willingness to use condoms in Chinandega. What emerged as most salient in both cities, however, was the unanimous concern for children and youth, and the perception that all strata of Nicaraguan society were losing them to drugs and addiction.

Given these conditions, and the eloquent concerns expressed about the growing use of drugs by different sectors of the community and by the users themselves, it is interesting that acknowledgement of drug *use* and associated health risks appear missing from media attention and public acknowledgment, both nationally and internationally. Concern about drug use has also been missing from the development and implementation of policies and programs at the national and international levels based, apparently on the reputation of the country as merely a bridge for drugs and the erroneous belief that the population remains abstinent.

While this study may not be generalizable to all of Managua and Chinandega, nor to the country as a whole because of the small, qualitative sample, it does, nevertheless, begin to address the urgent need for information regarding drug use and HIV risk. Furthermore, the study has identified regional differences in factors affecting these risks. Based upon these findings, we suggest the following recommendations for national and international policy development and program planning:

- Identify and acknowledge the problem of drug use and addiction.
- Separate trafficking and consumption as policy issues.
- Clearly establish the link between HIV/AIDS and drug use.
- Educate health professionals and policy makers about drug use and addiction.

- Re-enforce traditional values which work to support prevention and treatment.
- Dedicate more resources to the provision of treatment, especially gender appropriate services.
- Respond quickly to the growing drug crisis in youth.
- Develop and implement education and prevention activities in all sectors of the community, not only among the most vulnerable and involved.
- Continue research which will identify the dynamic patterns of drug use and HIV risk in rural and urban areas and among different populations.